DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

	A9CE
	Revision 27
	CESSNA
188	A188A
188A	A188B
188B	T188C
A188	
	March 31, 2003

TYPE CERTIFICATE DATA SHEET NO. A9CE

This data sheet which is part of Type Certificate A9CE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder — Cessna Aircraft Company
P O Box 7704
Wichita KS 67277

I. Model 188, AGwagon 230, 1 PCLM (Normal and Restricted Category), approved February 14, 1966

Engine — Continental O-470-R

*Fuel — 80/87 minimum grade aviation gasoline

*Engine limits — For all operations, 2600 rpm (230 hp)

Propeller and propeller limits

1. (a) McCauley 1A200/AOM fixed pitch
   Static rpm at max. permissible throttle setting:
   not over 2300, not under 2200
   No additional tolerance permitted
   Diameter: not over 90 in., not under 88 in.
2. (a) McCauley constant speed, 2A34C50 hub with 90A-2 blades
   Diameter: not over 88 in., not under 86 in.
   Pitch settings at 36 in. sta.: low 8°, high 22°
   (b) Governor: Garwin 34-828-01, McCauley C290D2/T1 or C290D3/T1, or Woodward A210452
3. (a) McCauley constant speed, 2A34C66 hub with 90AT-2 blades
   Diameter: not over 88 in., not under 86 in.
   Pitch settings at 36 in. sta.: low 8°, high 22°
   (b) Governor: Garwin 34-828-01, McCauley C290D2/T1 or C290D3/T1, or Woodward A210452
4. (a) McCauley constant speed, 2A34C201 hub with 90DA-2 blades
   Diameter: not over 88 in., not under 86.5 in.
   Pitch settings at 30 in. sta.: low 10.5°, high 24.5°
   (b) Governor: Garwin 34-828-01, McCauley C290D2/T1 or C290D3/T1, or Woodward A210452
5. (a) McCauley constant speed, 2A34C203 hub with 90DCA-2 blades
   Diameter: not over 88 in., not under 86.5 in.
   Pitch settings at 30 in. sta.:
   Low 10.0°, high 24.5°
   (b) Governor: Garwin 34-828-01, McCauley C290D2/T1 or C290D3/T1, or Woodward A210452

*Airspeed Limits (CAS) (Normal Category)

Never exceed	181 mph (157 knots)
Maximum structural cruising	144 mph (125 knots)
Maneuvering	127 mph (110 knots)
Flaps extended	110 mph (96 knots)

(See Additional Limitation for Restricted Category.)

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I. Model 188, AGwagon 230 (cont'd)

C.G. Range (Normal Category)	(+39.0) to (+45.5) at 2300 lb. or less (+41.0) to (+45.5) at 3300 lbs. Straight line variation between points given.
Empty weight C.G. range	None
*Maximum weight	3300 lb. (Normal Category)
Number of Seats (Max.)	1 (at +91 to +95)
Maximum Baggage	100 lb. (+12.0) (optional)
Fuel Capacity	37 gal. (+11.0; 36.5 gal. usable) *See Note 1 for data on unusable fuel.*
Oil Capacity	12 qt. (-17.0; includes 9 lb. unusable) *See Note 1 for data on undrainable oil.*

Control surface movements

Wing flaps (S/N 188-0001 through 188-0293)			0° -	28° ± 2°
Wing flaps (S/N 188-0294 and on)			0° -	20° ± 1°
Ailerons (from neutral)	Up	18° ± 1°	Down	10° ± 1°
Elevators	Up	26° 30' ± 1°	Down	21° ± 1°
Elevator tab	Up	12° ± 1°	Down	27° ± 1°
Rudder	Right	24° + 0°, -1°	Left	24° + 0°, -1°

(Neutral aileron is rigged with trailing edge 3° ± 30' below trailing edge of wing.)

Additional Limitations for Restricted Category

*Airspeed limits (CAS)	Maximum operating speed in agricultural operations	120 mph (104 knots)
*C.G. Range	(+39.0) to (+45.5) at 2300 lbs. or less (+42.0) to (+45.5) at 3800 lbs.	
*Maximum Weight	3800 lb. *(See Note 3.)*	
Serial numbers eligible	653, 188-0001 through 188-0572	

II. Model A188, AGwagon 300, 1 PCLM (Normal and Restricted Category), approved February 14, 1966

Engine	Continental IO-520-D
*Fuel	100/130 minimum grade aviation gasoline
*Engine limits	Takeoff (5 min.) at 2850 rpm (300 hp) For all other operations, 2700 rpm (285 hp)

Propeller and propeller limits

1. (a) McCauley D2A34C58 hub or D2A34C58-0 (oil filled) hub with 90AT-4 blades
   Diameter: not over 86 in., not under 84 in.
   Pitch settings at 36 in. sta.:
   Low 8°, high 25°
   (b) Governor: Garwin 34-828-01 or McCauley C290D2/T9 or C290D3/T9, or Woodward A210462
   (c) Spinner, Cessna 0752040 (optional)
2. (a) McCauley F2A34C58 hub with 90AT-4 blades
   Diameter: not over 86 in., not under 84 in.
   Pitch settings at 36 in. sta.:
   Low 8°, high 25°

II. Model A188, AGwagon 300 (cont'd)

(b) Governor: Garwin 34-828-01 or McCauley C290D2/T9 or C290D3/T9, or Woodward A210462

3. (a) McCauley D2A34C58/90AT-8 or D2A34C58-0/90AT-8 (oil filled)
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
Low 8.8°, high 25.8°
(b) Governor: Garwin 34-828-01, McCauley C290D2/T9 or C290D3/T9, or Woodward A210462

4. (a) McCauley D2A34C98/90AT-8 or D2A34C98-0/90AT-8 (oil filled)
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
Low 8°, high 25°
(b) Governor: Garwin 34-828-01, McCauley C290D2/T9 or C290D3/T9, or Woodward A210462
(c) Spinner, Cessna 0752040 (optional)

*Airspeed Limits (CAS) (Normal Category)	Never exceed	181 mph (157 knots)
	Maximum structural cruising	144 mph (125 knots)
	Maneuvering	127 mph (110 knots)
	Flaps extended	110 mph (96 knots)
	(See Additional Limitation for Restricted Category.)	

C.G. Range (Normal Category): (+39.0) to (+45.0) at 2300 lbs. or less; (+41.0) to (+45.5) at 3300 lbs. Straight line variation between points given.

Empty weight C.G. range: None

*Maximum weight: 3300 lbs. (normal category)

Number of seats (maximum): 1 (at +91 to +95)

Maximum baggage: 100 lb. (+12.0) (optional)

Fuel capacity: 37 gal. (+11.0; 36.5 gal. usable)
See Note 1 for data on unusable fuel.

Oil capacity: 12 qt. (-17.0; includes 9 lb. usable)
See Note 1 for data on undrainable oil.

Control surface movements:

Wing flaps (S/N 188-0001 through 188-0293)				0° - 28° ± 2°
Wing flaps (S/N 188-0294 and on)				0° - 20° ± 1°
Ailerons (from neutral)	Up	18° ± 1°	Down	10° ± 1°
Elevators	Up	26° 30' ± 1°	Down	21° ± 1°
Elevator tab	Up	12° ± 1°	Down	27° ± 1°
Rudder	Right	24° + 0°, -1°	Left	24° + 0°, -1°

(Neutral aileron is rigged with trailing edge 3° ± 30' below trailing edge of wing.)

Additional Limitations for Restricted Category

*Airspeed limits (CAS): Maximum operating speed in agricultural operations 120 mph (104 knots)

C.G. range: (+39.0) to (+45.5) at 2300 lbs. or less
(+42.4) to (+45.5) at 4000 lbs.

*Maximum weight: 4000 lbs. (*See Note 3.*)

Serial numbers eligible: 653, 188-0001 through 188-0572

III. Model 188A, AGwagon "A" & "B", 1 PCLM (Normal and Restricted Category), approved September 26, 1969

Engine	Continental O-470-R
*Fuel	80/87 minimum grade aviation gasoline
*Engine limits	For all operations, 2600 rpm (230 hp)
Propeller and propeller limits	1. (a) McCauley 1A200/AOM fixed pitch Static rpm at maximum permissible throttle setting: Not over 2300, not under 2200 No additional tolerance permitted. Diameter: not over 90 in., not under 88 in. 2. (a) McCauley constant speed, 2A34C50 hub with 90A-2 blades Diameter: not over 88 in., not under 86 in. Pitch settings at 36 in. sta.: low 8°, high 22° (b) Governor: Woodward A210452, Garwin 34-828-01, McCauley C290D2/T1 or C290D3/T1 3. (a) McCauley constant speed, 2A34C66 hub with 90AT-2 blades Diameter: not over 88 in., not under 86 in. Pitch settings at 36 in. sta.: low 8°, high 22° (b) Governor: Woodward A210452, Garwin 34-828-01, McCauley C290D2/T1 or C290D3/T1 4. (a) McCauley constant speed, 2A34C201 hub with 90DA-2 blades Diameter: not over 88 in., not under 86.5 in. Pitch settings at 30 in. sta.: low 10.5°, high 24.5° (b) Governor: Woodward A210452, Garwin 34-828-01, McCauley C290D2/T1 or C290D3/T1 5. (a) McCauley constant speed 2A34C203 hub with 90 DCA-2 blades Diameter: not over 88 in., not under 86.5 in. Pitch settings at 30 in. sta.: low 10.0°, high 24.5° (b) Governor: Woodward A210452, Garwin 34-828-01 McCauley C290D2/T1 or C290D3/T1
*Airspeed Limits (CAS)	Never exceed 181 mph (157 knots) Maximum structural cruising 144 mph (125 knots) Maneuvering 127 mph (110 knots) Flaps extended 110 mph (96 knots) *(See Additional Limitation for Restricted Category.)*
C.G. range (normal category)	(+39.0) to (+45.5) at 2300 lbs. or less (+41.0) to (+45.5) at 3300 lbs. Straight line variation between points given.
Empty weight C.G. range	None
*Maximum weight	3300 lbs. (normal category)
Number of seats (max.)	1 (at +91 to 95)
Maximum baggage	100 lb. (+12.0) (optional)
Fuel capacity	37 gal. (+11.0; 36.5 usable) *See Note 1 for data on unusable fuel.*

III. Model 188A, AGwagon "A" & "B" (cont'd)

Oil capacity	12 qt. (-17.0; includes 9 lb. unusable) *See Note 1 for data on undrainable oil.*				
Control surface movements	Wing flaps			Down	20° ± 1°
	Ailerons (from neutral)	Up	18° ± 1°	Down	10° ± 1°
	Elevators	Up	26° ± 1°	Down	21° ± 1°
	Elevator tab	Up	12° ± 1°	Down	27° ± 1°
	Rudder	Right	24° + 0°, -1°	Left	24° + 0°, -1°
	(Neutral aileron is rigged with trailing edge 3° ± 30' below trailing edge of wing.)				

Additional Limitations for Restricted Category

*Airspeed limits (CAS)	Maximum operating speed in agricultural operations 120 mph (104 knots)
C.G. range	(+39.0) to (+45.5) at 2300 lbs. or less (+42.0) to (+45.5) at 3800 lbs. Straight line variation between points given.
*Maximum weight	*See Note 3.*
Serial numbers eligible	18800573 through 18800832

IV. Model A188A, AGwagon "A" & "B", 1 PCLM (Normal and Restricted Category), approved September 26, 1969

Engine	Continental IO-520-D
*Fuel	100/130 minimum grade aviation gasoline
*Engine limits	Takeoff (5 min.) at 2850 rpm (300 hp) For all other operations, 2700 rpm (285 hp)

1. (a) McCauley D2A34C58 hub or D2A34C58-0 (oil filled) hub with 90AT-4 blades
   Diameter: not over 86 in., not under 84 in.
   Pitch settings at 36 in. sta.:
   Low 8°, high 25°
   (b) Governor: Garwin 34-828-01, McCauley C290D2/T9 or C290D3/T9, or Woodward A210462
2. (a) McCauley F2A34C58 hub with 90AT-4 blades
   Diameter: not over 86 in., not under 84 in.
   Pitch settings at 36 in. sta.:
   Low 8°, high 25°
   (b) Governor: Garwin 34-828-01, McCauley C290D2/T9 or C290D3/T9, or Woodward A210462
3. (a) McCauley D2A34C58/90AT-8 or D2A34C58-0/90AT-8 (oil filled)
   Diameter: not over 82 in., not under 80 in.
   Pitch settings at 36 in. sta.:
   Low 8.8°, high 25.8°
   (b) Governor: Garwin 34-828-01, McCauley C290D2/T9 or C290D3/T9, or Woodward A210462
4. (a) McCauley D2A34C98/90AT-4 or D2A34C98-0/90AT-4 (oil filled)
   Diameter: not over 86 in., not under 84 in.
   Pitch settings at 36 in. sta.:
   Low 8°, high 25°
   (b) Governor: Garwin 34-828-01, McCauley C290D2/T9 or C290D3/T9

IV. Model A188A, AGwagon "A" & "B" (cont'd)

5. (a) McCauley D2A34C98/90AT-8 or D2A34C98-0/90AT-8 (oil filled)
Diameter: not over 82 in., not under 80 in.
Pitch settings at 36 in. sta.:
Low 8.8°, high 25.8°
(b) Governor: Garwin 34-828-01, McCauley C290D2/T9 or C290D3/T9

*Airspeed Limits (CAS)	Never exceed	181 mph (157 knots)
	Maximum structural cruising	144 mph (125 knots)
	Maneuvering	127 mph (110 knots)
	Flaps extended	110 mph (96 knots)
	(See Additional Limitation for Restricted Category.)	
C.G. Range (Normal Category)	(+39.0) to (+45.5) at 2300 lbs. or less (+41.0) to (+45.5) at 3300 lbs. Straight line variation between points given.	
Empty weight C.G. Range	None	
*Maximum weight	3300 lbs. (normal category)	
Number of seats (max.)	1 (at +91 to +95)	
Maximum baggage	100 lb. (+12.0) (Optional)	
Fuel capacity	37 gal. (+11.0; 36.5 gal. usable) *See Note 1 for data on unusable fuel.*	
Oil capacity	12 qt. (-17.0; includes 9 lbs. unusable) *See Note 1 for data on undrainable oil.*	

Control surface movements					
	Wing flaps			Down	20° ± 1°
	Ailerons (from neutral)	Up	18° ± 1°	Down	10° ± 1°
	Elevators	Up	26° ± 1°	Down	21° ± 1°
	Elevator tab	Up	12° ± 1°	Down	27° ± 1°
	Rudder	Right	24° + 0°, -1°	Left	24° + 0°, -1°

(Neutral aileron is rigged with trailing edge 3° ± 30' below trailing edge of wing.)

Additional Limitations for Restricted Category

*Airspeed Limits (CAS)	Maximum operating speed in agricultural operations 120 mph (104 knots)
C.G. Range	(+39.0) to (+47.5) at 2300 lbs. or less (+39.4) to (+47.5) at 2500 lbs. (+42.4) to (+45.5) at 4000 lbs. Straight line variation between points given.
*Maximum weight	*See Note 3.*
Serial numbers eligible	18800573 through 18800832

V. Model 188B, AGpickup, 1 PCLM (Restricted Category), approved December 20, 1971
Model 188B, AGpickup, 1 PCLM (Normal Category) (See required equipment, item 2), approved December 20, 1971

Engine	Continental O-470-R (S/N 18800833 through 18801824) Continental O-470-S (S/N 18801825 and up) *(See Note 6.)*
*Fuel	80/87 minimum grade aviation gasoline

V. Model 188B, AGpickup (cont'd)

*Engine limits	For all operations, 2600 rpm (230 hp)
Propeller and propeller limits	1. (a) McCauley 1A200/AOM Fixed Pitch Static rpm at max. permissible throttle setting: Not over 2300, not under 2200 No additional tolerance permitted. Diameter: not over 90 in., not under 88 in. 2. (a) McCauley Constant Speed, 2A34C50 hub with 90A-2 blades Diameter: not over 88 in., not under 86 in. Pitch settings at 36 in. sta.: Low 8°, high 22° (b) Governor: Woodward A210452, Edo-Aire 34-828-01 or McCauley C290D2/T1 or C290D3/T1 3. (a) McCauley constant speed, 2A34C66 hub with 90AT-2 blades Diameter: not over 88 in., not under 86 in. Pitch settings at 36 in. sta.: Low 8°, high 22° (b) Governor: Woodward A210452, Edo-Aire 34-828-01 or McCauley C290D2/T1 or C290D3/T1 4. (a) McCauley constant speed, 2A34C201 hub with 90DA-2 blades Diameter: not over 88 in., not under 86.5 in. Pitch settings at 30 in. sta.: Low 10.5°, high 24.5° (b) Governor: Woodward 4210452, Edo-Aire 34-828-01 or McCauley C290D2/T1 or C290D3/T1 5. (a) McCauley constant speed, 2A34C203 hub with 90DCA-2 blades Diameter: not over 88 in., not under 86.5 in. Pitch settings at 30 in. sta.: Low 10.0°, high 24.5° (b) Governor: Woodward A210452, Edo-Aire 34-828-01, McCauley C290D2/T1 or C290D3/T1
*Airspeed Limits (CAS)	Never exceed 181 mph (157 knots) Maximum structural cruising 144 mph (125 knots) Maneuvering 116 mph (101 knots) Flaps extended (5°) 120 mph (104 knots) (10° - 20°) 110 mph (96 knots)
C.G. Range (normal category)	(+39.0) to (+45.5) at 2300 lbs. or less (+41.0) to (+45.5) at 3300 lbs. Straight line variation between points given.
Empty weight C.G. range	None
*Maximum weight	3300 lbs. (normal category)
Number of seats (max.)	1 (at +91 to +95)
Maximum cargo	26.7 cubic feet within operational gross weight
Fuel capacity	37 gal. (+11.0, 36.5 usable) *See Note 1 for data on unusable fuel.*
Oil capacity	12 qt. (-17.0; includes 9 lb. unusable) *See Note 1 for data on undrainable oil.*

V. Model 188B, AGpickup (cont'd)

Control surface movements	Wing flaps			Down	20° ± 1°
	Ailerons (from neutral)	Up	18° ± 1°	Down	10° ± 1°
	Elevators	Up	26° ± 1°	Down	21° ± 1°
	Elevator tab	Up	12° ± 1°	Down	27° ± 1°
	Rudder	Right	24° + 0°, -1°	Left	24° + 0°, -1°

(Neutral aileron is rigged with trailing edge 3° ± 30' below trailing edge of wing.)

Additional Limitations for Restricted Category

*Airspeed limits (CAS) — Maximum operating speed in agricultural operations 120 mph (104 knots)

C.G. Range — (+39.0) to (+45.5) at 2300 lbs. or less
(+42.0) to (+45.5) at 3800 lbs.
Straight line variation between points given.

*Maximum Weight — *See Note 3.*

Serial numbers eligible — 18800833 through 18802348

VI. Model A188B, AGwagon"C" and AGtruck, 1 PCLM (Restricted Category), approved December 20, 1971, Model A188B, Agwagon "C" and AGtruck, 1 PCLM (Normal Category), (see required equipment, Item 2), approved December 20, 1971

Engine — Continental IO-520-D

*Fuel — 100/130 minimum grade aviation gasoline (S/N 18800833 through 18803046)
100LL/130 minimum grade aviation gasoline (S/N 678T, 18803047 and on)

*Engine limits — Takeoff (5 min.) at 2850 rpm (300 hp)
For all other operations, 2700 rpm (285 hp)

Propeller and propeller limits

1. S/N 678T, 18800833 through 18803721
   (a) McCauley D2A34C58/90AT-8 or D2A34C98/90AT-8 or D2A34C58-0/90AT-8 (oil filled) or D2A34C98-0/90AT-8 (oil filled)
   Diameter: not over 82 in., not under 80 in.
   Pitch setting at 36 in. sta.:
   Low 8.8°, high 25.8°
   (b) Governor: Edo-Aire 34-828-01-1, McCauley C290D2/T9 or C290D3/T9, or Woodward A210462
2. S/N 678T, 18800833 through 18803721
   (a) McCauley D2A34C58/90AT-4 or D2A34C98/90AT-4 or D2A34C58-0/90AT-4 (oil filled) or D2A34C98-0/90AT-4 (oil filled)
   Diameter: not over 86 in., not under 84 in.
   Pitch settings at 36 in. sta.:
   Low 8°, high 25°
   (b) Governor: Edo-Aire 34-828-01-1, McCauley C290D2/T9 or C290D3/T9, or Woodward A210462
3. S/N 678T, 18802002 through 18803721 and those aircraft reworked per SE75-4
   (a) McCauley D3A32C90/82NC-2 or D3A32C90-N/82NC-2 (oil filled)
   Diameter: not over 80 in., not under 78.5 in.
   Pitch setting at 30 in. sta.:
   Low 10.4°, high 28.1°
   (b) Governor: McCauley C290D2/T9 or C290D3/T9, Edo-Aire 34-828-01-1 or Woodward A210462

VI. Model A188B (cont'd)

4. S/N 18803722 and on and those aircraft reworked per Cessna Service Kit SK188-76 or SK188-77
   (a) McCauley B2A34C205/90DHA-4
   Diameter: not over 86 in., not under 84.5 in.
   Pitch setting at 30 in. sta.:
   Low 9.7°, high 28.5°
   (b) Governor: McCauley C290D3/T9
5. S/N 18803722 and on
   (a) McCauley D3A32C408/82NDA-2
   Diameter: not over 80 in., not under 78.5 in.
   Pitch setting at 30 in. sta.:
   Low 10.4°, high 28.1°
   (b) Governor: McCauley C290D3/T9

*Airspeed limits (CAS)

(S/N 18800833 through 18802348)

Never exceed	181 mph	(157 knots)
Maximum structural cruising	144 mph	(125 knots)
Maneuvering	116 mph	(101 knots)
Flaps extended (5°	120 mph	(104 knots)
(10° - 20°)	110 mph	(96 knots)

(IAS)
(See Note 7 on use of IAS)

(S/N 678T, 18802349 through 18803721)

Never exceed	182 mph	(158 knots)
Maximum structural cruising	146 mph	(126 knots)
Maneuvering	118 mph	(103 knots)
Flaps extended (5°)	121 mph	(105 knots)
(10° - 20°)	109 mph	(95 knots)

(IAS)
(See Note 7 on use of IAS)

(S/N 18803722 and on)

Never exceed	179 mph	(156 knots)
Maximum structural cruising	144 mph	(125 knots)
Maneuvering	118 mph	(102 knots)
Flaps extended (5°)	122 mph	(106 knots)
(10° - 20°)	112 mph	(97 knots)

C.G. Range
(Normal Category)

(+39.0) to (+45.5) at 2300 lbs. or less
(+41.0) to (+45.5) at 3300 lbs.
Straight line variation between points given.

Empty weight C.G. Range

None

*Maximum weight

3300 lbs. (Normal Category)

Number of seats (maximum)

1 at (+91) to (+95)

Maximum cargo

1670 lb. at +43.0 sta. *(see Note 5)*

Fuel capacity

37 gal. (+11.0); (36.5 gal. usable) fuselage tank (through S/N 18802745)
56 gal. (+48.0); (54 gal. usable) wing tanks (through S/N 18801346)
54 gal. (+48.0); (52 gal. usable) wing tanks (S/N 678T, 18801347 and on)
See Note 1 for data on unusable fuel.

Oil capacity

12 qt. (-17.0; includes 9 lb. unusable through S/N 18803856)
13 qt. (-15.9) (9 lb. unusable) (S/N 18803857T and on)
See Note 1 for data on undrainable oil.

VI. Model A188B (cont'd)

Control surface movements	Wing flaps			Down	20° ± 1°
	Ailerons (from neutral)	Up	18° ± 1°	Down	10° ± 1°
	Elevators	Up	26° ± 1°	Down	21° ± 1°
	Elevator tab	Up	12° ± 1°	Down	27° ± 1°
	Rudder	Right	24° + 0°, -1°	Left	24° + 0°, -1°

(Neutral aileron is rigged with trailing edge 3° ± 30' below trailing edge of wing.)

Additional Limitations for Restricted Category

*Airspeed Limits (CAS)	Max. operation speed in agricultural operations (S/N 18800833 through 18802348)	120 mph (104 knots)
	Max. operation speed in agricultural operations (S/N 678T, 18802349 through 18803721)	121 mph (105 knots)
	Max. operation speed in agricultural operations (S/N 18803722 and on)	130 mph (113 knots)
C.G. Range	(+39.0) to (+47.5) at 2300 lbs. or less (+39.4) to (+47.5) at 2500 lbs. (+41.0) to (+46.4) at 3300 lbs. (+39.3) to (+45.2) at 4200 lbs. (see Note 3) Straight line variation between points given.	
*Maximum Weight	*See Note 3.*	
Serial numbers eligible	678T, 18800833 through 18803973 *(See Note 5.)*	

VII. Model T188C, Aghusky, 1 PCLM (Restricted Category), approved September 8, 1978

Engine	Continental TSIO-520-T		
*Fuel	100LL/100 minimum grade aviation gasoline		
*Engine limits	310 hp at 2700 rpm and 39.5 in. Hg. for all operations		
Propeller and propeller limits	1. (a) McCauley D3A34C402/90DFA-10 Diameter: not over 80 in., not under 78.5 in. Pitch settings at 30 in. sta.: Low 12.4°, high 28.5° Avoid continuous operation between 2000 and 2250 rpm above 27 in. mp. (b) Cessna spinner 0750286 (c) McCauley hydraulic governor C161031-0110		
*Airspeed limits (IAS) *(See Note 7 on use of IAS.)*	Maximum operational speed in agricultural operations		130 mph (113 knots)
	Flaps extended (5°)	121 mph (105 knots)	
	(10° - 20°)	109 mph (95 knots)	
C.G. Range (Normal Category)	(+39.0) to (+45.9) at 2300 lbs. or less (+39.7) to (+45.9) at 3300 lbs. (+40.0) to (+45.5) at 3300 lbs. (+39.2) to (+44.0) at 4400 lbs. *(See Note 3.)* Straight line variation between points given		
Empty weight C.G. Range	None		
*Maximum weight	3300 lbs. *(See Note 3.)*		

VII. Model T188C (cont'd)

Number of seats (Maximum)	1 at (+91) to (+95)
Maximum cargo	*See Note 5*.
Fuel capacity	54 gal. (+48.0); 52 gal. usable *See Note 1 for data on unusable fuel.*
Oil capacity	13 qt. (-18.7; includes 9 lb. unusable) *See Note 1*.
Maximum operating altitude	14,000 MSL

Control surface movements

Wing flaps			Down	20° ± 1°
Ailerons (from neutral)	Up	18° ± 1°	Down	10° ± 1°
Elevators	Up	26° ± 1°	Down	21° ± 1°
Elevator tab	Up	12° ± 1°	Down	27° ± 1°
Rudder	Right	24° + 0°, -1°	Left	24° + 0°, -1°

(Neutral aileron is rigged with trailing edge 3° ± 30' below trailing edge of wing.)

Serial numbers eligible: T18802839T, T18803307T, T18803308T, T18803325T through T18803974T

Data Pertinent to All Models

Datum	Fuselage station 0.0 (front face of firewall)
Leveling means	Two jig located nutplates and screws on left of tailcone
Certification basis	Part 21 of the Federal Aviation Regulations dated February 1, 1965, for Restricted Category. Part 23 of the Federal Aviation Regulations dated February 1, 1965, for Normal Category. In addition, (S/N 18803297 and on) FAR 23.1559 effective March 1, 1978, for Normal Category. For the T188C only, Part 21 of the Federal Aviation Regulations dated February 1, 1965, and Part 23 of the Federal Aviation Regulations dated February 1, 1965, with exception to 23.221 per 21.25(a)(1). In addition, FAR 23.1559 effective March 1, 1978. Application for Type Certificate dated April 7, 1965. Type Certificate NO. A9CE issued February 14, 1966, obtained by the manufacturer under delegation option procedures.

Equivalent Safety Items	S/N 678T, 18802349 and on S/N T18802839T, T18803307T, T18803308T, T18803325T and on
Airspeed Indicator	FAR 23.1545 *(See Note 7 on use of IAS.)*
Airspeed Limitations	FAR 23.1583(a)(1)

Production Basis	Production Certificate No. 4. Delegation Option Manufacturer No. CE-1 authorized to issue airworthiness certification under delegation option provisions of Part 21 of the Federal Aviation Regulations.

Equipment: The basic required equipment as specified in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. This equipment must include a current Airplane Flight Manual effective S/N 678T, 18803297 and on and T18802839T and T18803307T, T18803308T, and T18803325T and on. In addition, the following items of equipment are required:

(1) Stall Warning Indicator, Cessna Dwg. 1670056.
(2) Model 188B and A188B eligible for normal category certification when Cessna spring 1660206-3 replaces 1660206-2.

NOTE 1. Current weight and balance report together with list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 3 lbs. at +6.0 with the fuselage tank, or 42 lbs. at +48.0 Serials 188-0446 through 188-0572 (or 12 lbs. at +37.3 Serials 18800573 and on) when wing tanks are installed, and undrainable oil of 0.0 lb. at -17.0 through S/N 18802348, or full oil of 22.5 lb. at -17.5 S/N 678T, 18802349 through S/N 18803856; 24.4 lb. at -15.9 S/N 18803857T and on; 24.4 lb. at -18.7 S/N T18802389T, T18803307T, T18803308T, T18803325T and on.

NOTE 2. The following information must be displayed in the form of composite or individual placards.

(a) In full view of the pilot: (S/N 188-0001 through 188-0572 and 18800573 through 18800832)

(1) "This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings, and manuals. For restricted category operations, refer to additional placards and limitations."
(2) "No acrobatic maneuvers including spins approved."
(3) "Maximum design weight - 3300 lb. (Reference weight and balance data for loading instructions)."
(4) "Maximum maneuvering speed - 127 mph, CAS."
(5) "Maximum altitude loss in stall recovery - 200 ft."
(6) "Maximum flight maneuvering load factors:

Flaps Up	+3.8, -1.52
Flaps Down	+3.0"

(7) Maximum flap extension speed - 110 mph, CAS."
(8) "Airplane controllable in 15 knot crosswind."
(9) "VFR - DAY" or
(10) "VFR - DAY - NIGHT."

(b) (1) In full view of the pilot: (S/N 18800833 through 18802348)
"This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings, and manuals. For restricted category operations refer to additional placards and limitations.

MAXIMUMS

Maneuvering speed		116 mph CAS (101 knots)
Gross weight (normal category)		3300 lb.
Altitude loss in stall recovery		140 ft.
Demonstrated crosswind		15 knots
Flight load factor	Flaps Up	+3.8, -1.52
	Flaps Down 5°	+2.5
	Flaps Down 10° - 20°	+2.0

Reference weight and balance data for loading instructions. No acrobatic maneuvers, including spins, approved. Known icing conditions to be avoided. This airplane is certified for the following flight operations as of date of original airworthiness certificate.
VFR - DAY - NIGHT" (as applicable)

(2) In full view of the pilot: (S/N 18802349 through S/N 18803296)
"This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings, and manuals. For restricted category operations refer to additional placards and limitations.

MAXIMUMS

Maneuvering speed		118 mph IAS
Gross weight (normal category)		3300 lb.
Altitude loss in stall recovery		140 ft.
Demonstrated crosswind		15 knots
Flight load factor	Flaps Up	+3.8, -1.52
	Flaps Down 5°	+2.5
	Flaps Down 10° - 20°	+2.0

Reference weight and balance data for loading instructions. No acrobatic maneuvers, including spins, approved. Known icing conditions to be avoided. This airplane is certified for the following flight operations as of date of original airworthiness certificate.

VFR - DAY - NIGHT" (as applicable)

(3) In full view of the pilot: (S/N 678T, 18803297 and on)
"The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Normal Category. Other operating limitations which must be complied with when operating this airplane in this category or in the Restricted Category are contained in the Airplane Flight Manual.

Refer to weight and balance data for loading instructions.
No acrobatic maneuvers, including spins, approved.
Flight into known icing conditions prohibited.

This airplane is certified for the following flight operations as of date of original airworthiness certificate.

DAY - NIGHT - VFR" (as applicable)

(4) In full view of the pilot: (S/N T18802839T, T18803307T, T18803308T, T18803325T and on)
"The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Restricted Category. Other operating limitations which must be complied with when operating this airplane in this category are contained in the Airplane Flight Manual. Reference weight and balance data for loading instructions. No acrobatic maneuvers, including spins, approved. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate.

VFR - DAY - NIGHT" (as applicable)

(c) (1) On crash pad: (S/N 188-0001 through 18802348)
Flaps 5° 120 mph
Flaps 10° and 20° 110 mph

(2) On crash pad: (S/N 18802349 through 18803296)
Flaps 5° 121 mph IAS
Flaps 10° and 20° 109 mph IAS

(3) On crash pad: (effective S/N 678T, 18803297 through 18803721)

MAXIMUM AIRSPEEDS	
Maneuver	118 MIAS
Flaps 5°	121 MIAS
Flaps 10° and 20°	109 MIAS
Agricultural operations	121 MIAS

(4) On crash pad: (effective S/N 18803722 and on)

MAXIMUM AIRSPEEDS - MIAS	
Maneuver (3300 lbs.)	118
Flaps 5°	122
Flaps 10° and 20°	112
Agricultural operations	130

(d) (1) On flap handle: (S/N 188-0001 through 188-0293)
"FLAPS - WARNING Avoid slips with flaps extended."
"FLAPS - PULL TO EXTEND

Takeoff	Retracted	
	1st Notch	10°
	2nd Notch	20°
Landing	0 to 3rd Notch	30° "

(2) On flap handle: (S/N 188-0294 through 188-0572 and 18800573 through 18800832)
"FLAPS - PULL TO EXTEND

Takeoff and Landing	Retracted	0°
	1st Notch	10°
	2nd Notch	20°

(3) On flap handle: (S/N 678T, 18800833 and on)
"FLAPS - PULL TO EXTEND

Takeoff	Retracted	0°
	1st Notch	5°
and	2nd Notch	10°
Landing	3rd Notch	20° "

(e) (1) Adjacent to the fuel valve control:
"Fuel Valve Push-on; 36.5 gals. usable." (through S/N 18802745)
(2) Adjacent to the fuel valve control for models equipped with wing fuel tanks:
"Fuel Valve Push-on; 49 gals. usable." (S/N 188-0446 through 188-0572)
"Fuel Valve Push-on; 54 gals. usable." (S/N 18800573 through 18801346)
"Fuel Valve Push-on; 52 gals. usable." (S/N 678T, 18801347 and on)

(f) On Doors:
"Do not open doors in flight."

(g) On Baggage Door: (S/N 188-0001 through 188-0572 and S/N 18800573 through 18800832)
"Maximum baggage capacity 100 lb., articles stowed in this compartment to be securely tied down." Refer to Owner's Manual for details.

(h) On Instrument Panel:
"No Smoking." (Except with optional ash tray installation)

(i) On Hopper Lid:
(1) "Hopper capacity 200 U.S. Gal."
Serial 188-0001 through 18801040
"Maximum allowable hopper load - 1670 lb. See Weight and Balance Data."
Serial 18801041 and on
(2) "Max. allowable hopper load - 1800 lb. See Weight and Balance Data."
(On aircraft serials with "T" suffix)
(3) "Max. allowable hopper load - 1900 lb. See Weight and Balance Data."
(On aircraft serials with prefix and suffix "T")

(j) Adjacent to the master switch: (S/N 18800573 through 18801040)
(1) "Do not turn off alternator in flight except in emergency."

(k) Below the fuel flow gauge: (A188, A188A, and A188B through S/N 18802745)
"Fuel Flows at Full Throttle

	2850 rpm	2700 rpm
S.L.	24	23
4000 ft.	22	21
8000 ft.	20	19"

A188B (S/N 678T, 18802746 through 18803296)
"Max. Power Settings and Fuel Flow Takeoff (5 min. only) 2850 rpm
Max. Continuous Power 2700 rpm

Fuel Flows at Full Throttle

	2700 rpm	2850 rpm
S.L.	23 gph	24 gph
4,000 ft.	21 gph	22 gph
8,000 ft.	19 gph	20 gph"

A188B (S/N 18803297 and on)
"Min. Fuel Flows at Full Throttle

RPM	S.L.	4000	8000	12,000
2700	23 GPH	21 GPH	19 GPH	17 GPH
2850	24 GPH	22 GPH	20 GPH	18 GPH"

T188C (S/N T18802839T, T18803307T, T18803308T, T18803325T and on)
"Maximum Allowable Manifold Pressure

Press Alt.	MP. in. Hg.
S.L.	39.5
2500	38.8
5000	38.1
7500	37.3"

(l) (1) Adjacent to or on the fuel filler cap as applicable (fuselage tank)
"80/87 Octane 37 U.S. Gal. Cap." (O-470 engine)
"100/130 Octane 37 U.S. Gal. Cap." (IO-520 engine)
(2) Adjacent to or on the fuel filler caps (wing tanks)
"100/130 Octane 28 U.S. Gal. Cap." (through S/N 18801346)
"100/130 Octane 27 U.S. Gal. Cap." (S/N 18801347 through 18803046)
"Service this airplane with 100LL/100 Min.
Aviation Grade Gasoline - Capacity 27.0 Ga." (S/N 678T, 18803047 and on)

(m) Near tailwheel lock control: (S/N 678T, 18800833 and on) (except for serials with "T" prefix) "Lock for flight."

(n) On outside of cockpit doors:
"For emergency door removal pull out hinge pins."

(o) Below each door sill on inside of cockpit:
"Pull - Emergency Door Release."

(p) On Control Lock:
"Control Lock - Unlock before starting engine."

(q) On Crash Pad (T18802839T, T18803307T, T18803308T, T18803325T and on)
"Avoid Continuous Operation above 27 in. M.P. between 2000 and 2250 rpm."

NOTE 3. When operating in restricted category, operators may approve higher maximum weights as permitted by FAA Advisory Circular No. 20-33B and Civil Aeronautics Manual 8. With respect to this action, these aircraft have demonstrated satisfactory operation in the restricted category envelope given at 1500 ft. altitude and standard day at the following restricted gross weights:

188 Series		3800 lb.
A188 Series	(Serials 188-0001 and on)	4000 lb.
	(Serials 18800967T through 18801374T)	4000 lb.
	(Serials 678T, 18801375T and on)	4200 lb.
T188C Series	(Serials T18802839T, T18803307T, T18803308T, T18803325T and on)	4400 lb.

The following additional information must be displayed in the form of placards when operating in the Restricted Category:

(a) On Instrument Panel in full view of the pilot:
  (1) "Maximum operating speed in agricultural operations - 120 mph (104 knots)" (S/N 188-0001 through 18802348)
  (2) "Maximum operating speed in agricultural operations - 121 mph IAS. (105 knots IAS)." (S/N 18802349 through 18803296)
  (3) T188C (Serials T18802839T, T18803307T, T18803308T, T18803325T and on)

MAXIMUM AIRSPEEDS	
Maneuver (3300 lbs.)	117 MIAS
Flaps 5°	121 MIAS
Flaps 10° to 20°	109 MIAS
Agricultural Operation	130 MIAS"

  (4) "Hopper Dump - Pull"
  (S/N 188-0001 through 18801374) (Airplanes with Transland dump plate assembly)
  "Hopper Dump - - - - - - →"
  (S/N 188-0390 and on) (on dump handle) (Airplanes with Transland or Cessna gate box assembly)
  "Dump"
  (S/N 18802311 and on) (Airplanes with Transland P/N 21767 Australian dump plate assembly)

(b) On canopy, side, window or fuselage side panel:
  "RESTRICTED"

NOTE 4. Cylinder head probe location No. 1 cylinder through S/N 18803046; S/N 18803722 and on. No. 5 cylinder S/N 678T, S/N 18803047 through S/N 18803721. No. 2 cylinder S/N T18802839T, T18803307T, T18803308T, T18803325T and on.

NOTE 5. The letter "T" suffix after the serial number indicates an A188 series aircraft with an 1800 lb. maximum capacity hopper (Ex: 18800967T). Serial numbers with prefix "T" and suffix "T" indicate T188C aircraft with 1900 lb. maximum capacity hopper. (Ex: T18803329T)

NOTE 6. The installation of the O-470-S engine in Model 188B (1972 through 1974) will require a change of the oil temperature gauge. Reference Cessna Service Letter SE 75-2 for this change.

NOTE 7. (a) The marking of the airspeed indicator with IAS provides an equivalent level of safety to FAR 23.1545 when the approved airspeed calibration data presented in Section VI of the Owner's Manual listed below is available to the pilot:

A188B	Cessna P/N D1064-13	(S/N 18802349 through S/N 18802745)
A188B	Cessna P/N D1089-13	(S/N 18802746 through S/N 18803046)
A188B	Cessna P/N D1117-13	(S/N 18803047 through S/N 18803296)

(b) The marking of the airspeed indicator with IAS provides an equivalent level of safety to FAR 23.1545 when the approved airspeed calibration data presented in the FAA approved Airplane Flight Manual listed below is available to the pilot:

A188B	Cessna P/N D1166-13	(S/N 678T, 18803297 through S/N 18803521)
T188C	Cessna P/N D1168-13	(S/N T18803307T, T18803308T, T18803325T through S/N T18803521T)
A188B	Cessna P/N D1180-13FM	(S/N 18803522 through S/N 18803721)
T188C	Cessna P/N D1181-13FM	(S/N T18803522T through T18803721T)
A188B	Cessna P/N D1201-13FM	(S/N 18803722 through 18803856)
T188C	Cessna P/N D1202-13FM	(S/N T18803722T through T18803856T)
A188B	Cessna P/N D1220-13FM	(S/N 18803857T through 18803926T)
T188C	Cessna P/N D1221-13FM	(S/N T18803857T through T18803926T
A188B	Cessna P/N D1238-13FM	(S/N 18803927T through 18803973T)
T188C	Cessna P/N D1239-13FM	(S/N T18802839T, T18803927T through T18803974T)

NOTE 8. 14 volt electrical system
188/A188 series through Serial 18803046

28 volt electrical system
A188 Series, Serial 678T, 18803047 and on
T188 Series, Serial T18803307T, T18803308T, T18803325T and on

In addition to the placards specified above, the prescribed operating limitations indicated by an asterisk (*) under Sections I through VII of this data sheet must also be displayed by permanent markings.

Note: For 188, A188, and T188:

"WARNING": Use of alcohol-based fuels can cause serious performance degradation and fuel system component damage, and is therefore prohibited on Cessna airplanes."

....END....